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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,554	03/03/2002	Nobuyuki Kanno	FY16758PCTUS	3695

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ERNEST A. BEUTLER
ATTORNEY AT LAW
500 NEWPORT CENTER DRIVE
SUITE 945
NEWPORT BEACH, CA 92660

EXAMINER

PHAN, HAU VAN

ART UNIT

PAPER NUMBER

3618

DATE MAILED: 07/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/009,554

Applicant(s)

KANNO, NOBUYUKI

Examiner

Hau V Phan

Art Unit

3618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Acknowledgment

1. The amendment filed on 5/17/2003 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alber (5,246,082) in view of Telford et al. (4,545,567).**

Alber in figures 1 and 4-5 discloses a small vehicle for rolling chair comprising a frame (not shown), a wheel (not shown), an electric motor (65) having an output shaft (35) and a transmission for selectively driving the wheel from the electric motor output shaft. The transmission comprises a planetary gear mechanism having a sun gear element (38), at least one planetary gear element (39) meshing with the sun gear (figure 1). Alber also discloses a ring gear element (12) meshing with the planetary gear element and a carrier plate element (37) supporting planetary gear element for rotation. The output shaft driving one of the planetary gear mechanism elements. Alber fails to show a coupling element for selectively retaining ring gear element against rotation.

Telford et al. in figures 1 and 3-4 teach a winch power transmission comprising a ring gear element (180) and a coupling element (212) for selectively retaining ring gear element against rotation. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the small vehicle for rolling chair of Alber with the winch power transmission having a ring gear element and a coupling element as taught by Telford in order to selectively engagement and disengagement the ring gear from the coupling element manually.

Regarding claim 2, Alber discloses the output shaft (35) connected to the carrier plate element coaxially with the axis of the plate element (figure 1), a wheel gear fixed inside cylindrical surface of the wheel driven by an output gear formed on the transmission output shaft (figure 2). The motor output shaft and the transmission output shaft are disposed coaxially (figure 1).

Regarding claim 3, Alber discloses a section of wheel (another section of the wheel is the same) driven by a respective motor and planetary gear mechanism mounted on the wheel, an operation mechanism mounted on the vehicle frame and a transmission system for transmitting the action of the operation mechanism simultaneously to both coupling elements of the planetary gear mechanism (figure 4).

Regarding claim 4, Alber in figure 1 shown the output shaft drives the sun gear element (figure 1).

Regarding claim 5, Alber in figure 1 shown the carrier plate (37) coupled to the wheel.

Regarding claim 6, Alber in figure 1 shown the ring gear element (12) permitted to rotate the planetary gear mechanism element (figure 1).

Regarding claims 7 and 9, Telford et al. teach the ring gear having at least one locking detent opening (208) and the coupling element includes a respective locking pin (218) to engage the locking detent opening for restraining the ring gear from rotation when the locking pin being actuated by a common operator.

Regarding claim 8, Telford et al. teach the locking pin, which can be operated through a cable (col. 12, lines 57-61).

Response to Arguments

4. Applicant's arguments with respect to claims 1-6 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Keiser discloses an infinitely variable ratio transmission and Pollman discloses a hydromechanical transmission.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hau V Phan whose telephone number is 703-308-2084. The examiner can normally be reached on 7:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Johnson can be reached on 703-308-0885. The fax phone numbers

Art Unit: 3618

for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

HP *HP*
June 30, 2003

Brian L. Johnson
BRIAN L. JOHNSON
SUPERVISORY PATENT EXAMINER 6/30/03
TECHNOLOGY CENTER 36